

NEW SPECIES OF NEOTROPICAL PRIONINAE
(COLEOPTERA: CERAMBYCIDAE)

JOHN A. CHEMSAK

University of California, Berkeley, CA 94720

ABSTRACT

Three new species of Neotropical prionine Cerambycidae are described: *Derancistrus michelii* from Puerto Rico; *Derobrachus dentipes* from Costa Rica; and *Prionus howdeni* from Mexico.

Although the Neotropical Prioninae are in need of revision, certain new species at hand are sufficiently distinctive to warrant description. Several of these are described below to make the names available for other existing and future projects.

Mr. Julio Micheli of Puerto Rico has made the specimens of *Derancistrus* available for this study. The Canadian National Collection, Ottawa and the Essig Museum of Entomology, Berkeley are also acknowledged for providing material. This work was carried out during the course of a National Science Foundation sponsored study on North American Cerambycidae through Grant DEB76-23849 A01. Celeste Green prepared the illustration.

Derancistrus michelii Chemsak, **new species**

Male: Form moderate sized to rather large, depressed; integument dark reddish brown, pronotum usually piceous, elytra often paler with epipleura narrowly yellowish. Head narrow, front short, very deeply impressed; vertex elongate, deeply, broadly impressed, impression extending to neck, narrowing behind, V-shaped; punctures rather fine, dense, irregular; pubescence pale, depressed, usually dense in depression behind eyes; antennae extending to a little beyond middle of elytra, segments moderately flattened, glabrous, segments rather finely, densely, confluent punctate, finely asperate along inner margins, outer segments with numerous poriferous pits, third segment about 1.6 times longer than first, fourth subequal to first. Pronotum much broader than long, sides gradually expanding back from apex to near base then suddenly narrowing to base forming an obtuse angle (Fig. 1),

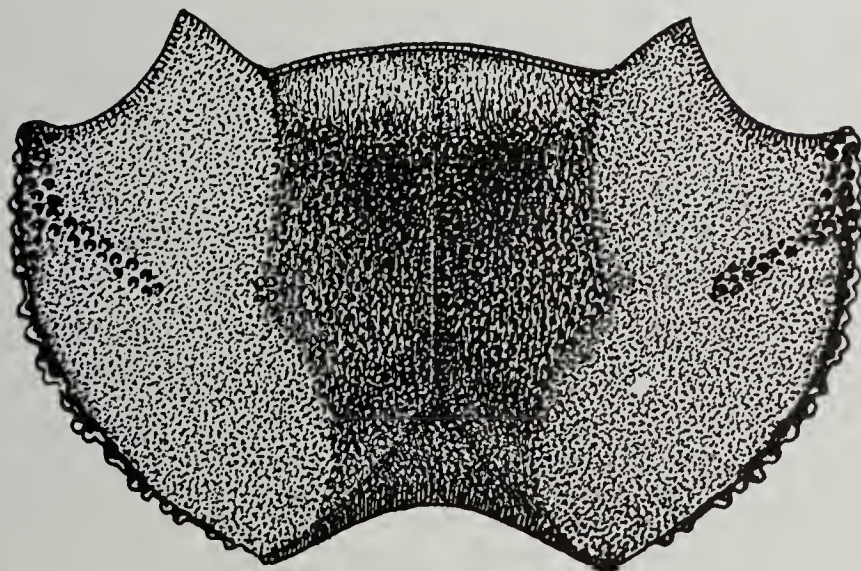


Fig. 1. Pronotum of *Derancistrus michelii* Chemsak, male.

margins crenulate with an obtuse tubercle at angle; disk with a broad, shining, angulate, amphora-shaped area at middle, this area very feebly impressed toward anterior end; sides opaque, very finely, densely punctate with a coarsely punctate, narrow line extending from angle of amphora back to angle of lateral margin; pubescence in middle area often very dense, recumbent, grayish; prosternum opaque except for median keel, intercoxal process deeply V-shaped at apex; meso- and metasternum usually densely grayish pubescent at sides, middle finely, sparsely punctate. Elytra about twice as long as broad, tapering toward apex; punctures coarsely rugose at base, becoming finer and confluent toward apex; pubescence usually consisting of numerous small clumps of appressed pubescence with short individual hairs interspersed; apices rounded, finely serrate. Legs robust, femora gradually enlarging, moderately densely punctate; front tibiae with an internal brush of long yellowish hairs. Abdomen finely, densely punctate and pubescent at sides; last sternite emarginate at apex. Length, 21-41 mm.

Female: Form similar. Antennae extending to about middle of elytra. Pronotum shining, middle area not distinctly delimited, side coarsely and finely punctate; pubescence extending transversely along posterior margin only; prosternum rugulose; metasternum sparsely punctate and nonpubescent at sides. Legs less robust, glabrous, front tibiae without an internal brush. Abdomen finely sparsely punctate, very sparsely pubescent; last sternite narrowly truncate at apex, middle often notched. Length, 24-38 mm.

Holotype male, allotype (National Museum of Natural History) from Road 10, Km. 21, 1500 ft., Puerto Rico, 6 July 1976, 14 June 1977 (J. Micheli); 28 paratypes (19 males, 9 females) same locality, 18 June 1976, 6 July 1976, 9 July 1976, 18 July 1976, 28 July 1976, 7 August 1976, 8 August 1976, 18 September 1976, 2 October 1976, 14 May 1977, 14 June 1977 and 20 August 1977, all J. Micheli collector. Additional paratypes all from Puerto Rico as follow: 1 female, Divisoria, 1 August 1975 (J. Micheli); 1 male, 1 female, San German, 8 September 1975 (J. Micheli); 1 female, Maravilla, 22 July 1976 (J. Micheli); 1 male, Guayama, 28 May 1976 (N. Micheli); 1 male, 1 female, Mayaguez, 8 March 1976 (J. Micheli; J. L. Collazo); 3 males, 4 females, Caribbean National Forest, Toro Negro, 3600 ft., 24 July and 22 August 1976 (J. Micheli), 22 July and 10 September 1976 (J. Micheli).

This species varies considerably in size and to some extent in coloration. The elytra are often paler, and in some examples the pale marginal band is not distinct. In some males, the median portion of the pronotal disk is very densely pubescent and the elytra are covered by numerous, small patches of appressed pubescence.

D. michelii is separated from *D. bilineatus* (Fabricius) by the deeply, longitudinally sulcate pronotal disk of *D. bilineatus*. That species also has a shorter, sparsely punctate third segment of the antennae and the males have internal brushes on all of the tibiae. From *D. thomae* (L.), *D. michelii* differs by the flattened, barely impressed pronotal disk, rounded sides of the pronotum with the external angles short and obtuse, densely punctate and pubescent metepisternum and sides of the abdominal sternites and more densely punctate antennal segments.

Mr. Julio Micheli of Ponce, Puerto Rico, to whom this species is dedicated, has supplied the following observations on *D. michelii*.

This species occurs in humid to very humid forests at an elevation of 1000 to 3600 feet. Larvae bore in decayed logs of various diameters. Pupa-tion occurs within the logs and adult emergence takes place about 22 days later (based on two observations in the laboratory). Adults are diurnal and may be taken on foliage of low plants from midmorning to early afternoon. They can also be found running over dead logs during the warmer hours.

In addition to the type series, *D. michelii* has also been reported from the following localities in Puerto Rico: Lares, Adjuntas, Guilarte Forest, Rio Piedras, and Luquillo Experimental Forest. This appears to be the most common species of *Derancistrus* on the island.

Prionus (Prionus) howdeni Chemsak, **new species**

Male: Form moderate sized; integument piceous, elytra and lateral margins of pronotum orange brown. Head with front very short, deeply impressed; mandibles moderately long, finely punctate; median impression deep, extending onto neck; punctures rather fine, confluent with rounded pits on vertex; eyes separated on vertex by about length of fourth antennal segment; antennae 12-segmented, reaching to a little beyond middle of elytra, segments slightly produced at apices, segments to sixth finely, sparsely punctate, outer segments finely striate. Pronotum narrower than base of elytra; lateral teeth moderate, anterior pair short, median pair larger, basal margin almost right angles; disk very irregularly, densely punctate, punctures consisting of rounded, elevated protuberances of varying sizes; prosternum barely punctate, very sparsely pubescent; mesosternum very finely, shallowly punctate; metasternum finely, densely punctate, densely clothed with long, erect, yellowish hairs. Scutellum glabrous, finely, moderately densely punctate, rounded behind. Elytra less than twice as long as broad; puncture dense, rugose, confluent, becoming finer toward apex; pubescence absent; each elytron bicostate, costae extending from base and uniting at apical one fourth; apices rounded, sutural angles lightly dentate. Legs slender, sparsely punctate; front tibiae excavated and asperate beneath; posterior tarsi slender, segments finely punctate and sparsely pubescent dorsally, third segment with lobes dentate at apices. Abdomen shining, glabrous, finely, rather sparsely punctate; last sternite emarginate at apex. Length, exclusive of mandibles, 31 mm.

Holotype male (Canadian National Collection) from 11 mi. SW El Salto, Durango, Mexico, 30 June 1964, on dead cypress (H. F. Howden).

The coloration and sculpturing of the elytra and the unusual protruding punctures of the pronotum make this one of the most distinctive New World species of *Prionus*.

Derobrachus dentipes Chemsak, **new species**

Male: Form large, sides tapering posteriorly; integument dull, dark reddish-brown. Head small, front short; eyes large, separated above by width of base of third antennal segment, beneath about twice as much; median line broad, deep, channeled by elevated margins; neck behind eyes convergent; palpi unequal, apical segments slightly expanded apically; mandibles elongate, asymmetrical; antennae slender, shorter than body, scape slender, conical, third segment slender, subglabrous, shallowly sulcate at sides, inside with several small asperites, about twice as long as fourth segment, segments from eighth with prominently raised striations, segments almost impunctate. Pronotum almost twice as broad from bases of lateral spines as long; each side with three prominent, acute spines; disk elevated, coarsely scabrous and densely, finely punctate; pubescence dense, golden, erect, denser and appressed along apical and basal margins; prosternum finely asperate, moderately densely pubescent, intercoxal process gradually arcuate; meso- and metasternum finely, densely punctate, densely clothed with suberect, golden pubescence. Elytra more than twice as long as basal width, sides broadly explanate behind humeri; disk opaque, minutely, densely rugulose; pubescence rather sparse, short, erect; each elytron tricostate; apices narrowly rounded, sutural spine short. Legs slender, elongate; tibiae with a double row of sharp spines on inside edge; tarsi normal. Abdomen glabrous, minutely punctate; last sternite narrowly, deeply emarginate at apex. Length, exclusive of mandibles, 51 mm.

Holotype male (California Academy of Sciences) from Zapote de Upala (vic. Bijagua), Alajuela Prov., Costa Rica, 7 July, 1973 (R. Ortiz).

This species is very distinctive by the large eyes, pubescent pronotum and spined tibiae.



BOOK REVIEW

Beetles and how they live, by D. H. Patent and P. C. Schroeder. 1978. Holiday House Inc., 18 E 53rd St., New York, NY 10022. Hardbound, 159p., \$7.95.

Patent and Schroeder have written an interesting account on beetles, and how they live, for the junior high school and high school audience. The general morphology, flight, and reproduction of these insects is covered with a minimum of technical terms but without diagrams. There are excellent chapters on beetle foods and feeding, water and deserts for homes, and habits of dung beetles. One of the features of this volume is the description of successful examples of biological control involving beetles. The term itself (biological control) is neither used in the text nor listed in the index. About 20 black and white photographs are included throughout the text (in two instances the captions are misleading or incorrect). For the student who has been "turned on" by beetles and how they live, a final chapter provides very helpful information on observing and collecting beetles. Additional listings after the last chapter provides names and addresses of supply houses (for entomology equipment), and suggested reading including both books and magazine articles. Coleopterists should be interested in recommending this volume to their local high school and municipal libraries.

—P.P.S.

